



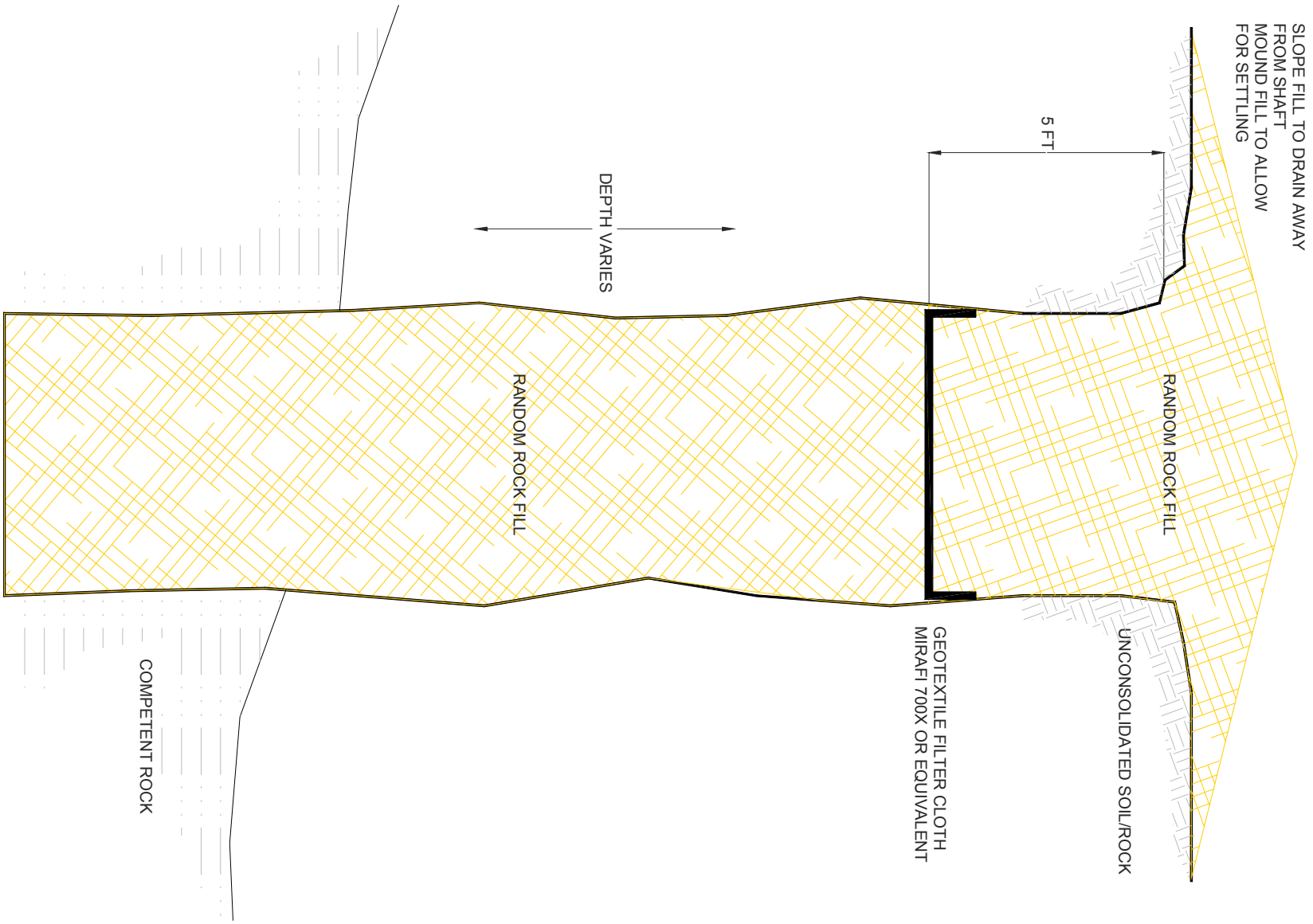
# MINE RECLAMATION PROJECT

## Scale: as noted

Design: LAA Drafting: JCR

Refer to Spec Section 0250

Sheet E1 of E14



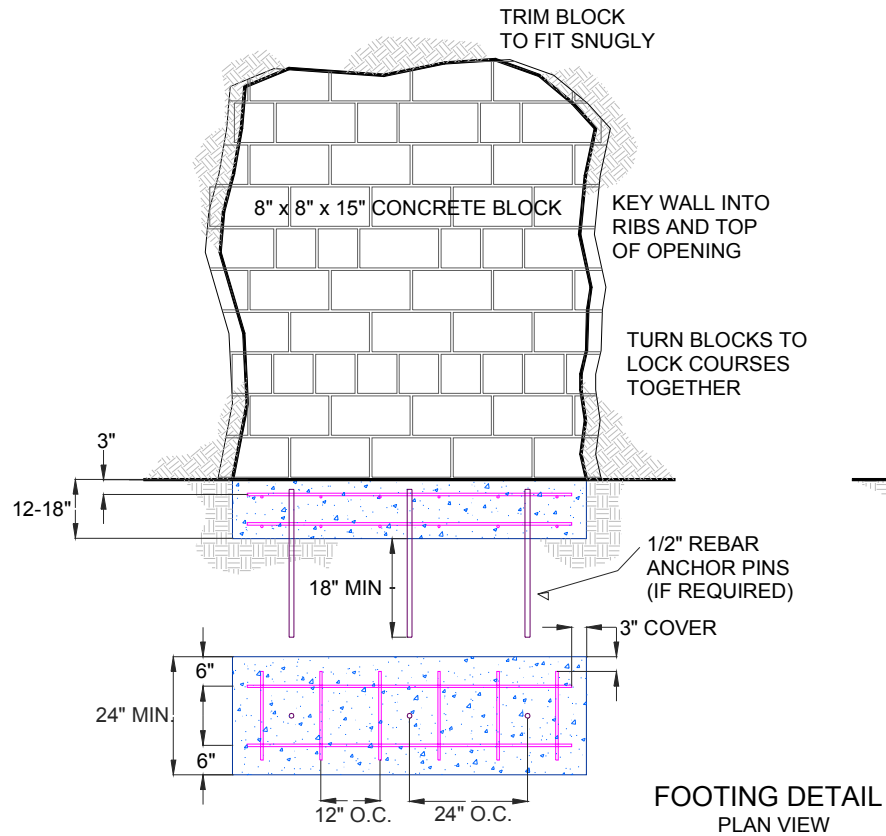
**UTAH  
NATURAL RESOURCES**  
**Oil, Gas and Mining**  
Abandoned Mine Reclamation Program

**MINE RECLAMATION  
PROJECT**

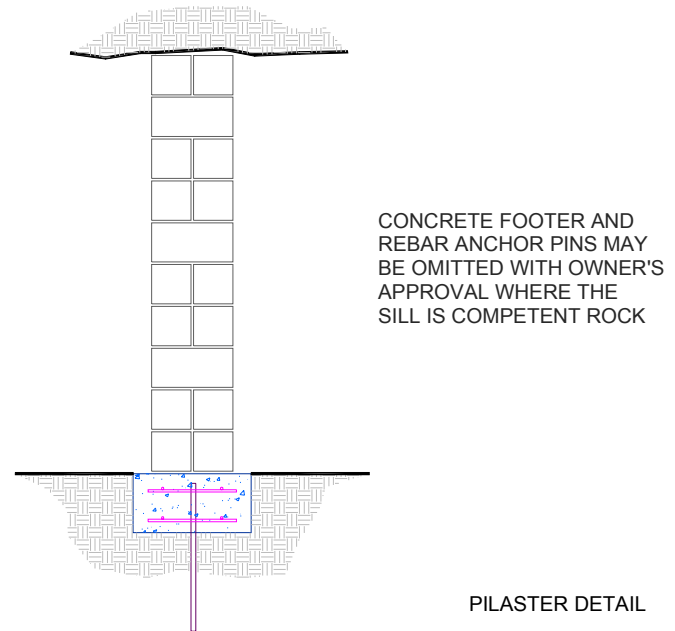
**SHAFT BACKFILL CLOSURE**

Scale: as noted	Design: LAA Drafting: JCR
Refer to Spec Section 0250	Sheet E2 of E14

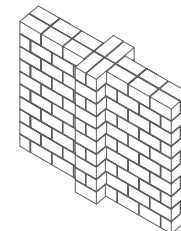
TYPICAL ELEVATION



TYPICAL SECTION



PILASTER DETAIL



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**MINE RECLAMATION  
PROJECT**

**SHAFT BACKFILL CLOSURE**

Scale: as noted

Design: LAA Drafting: JCR

Refer to Spec Section 0250

Sheet E2 of E14

Technical drawing showing a cross-section and plan view of a footing and wall.

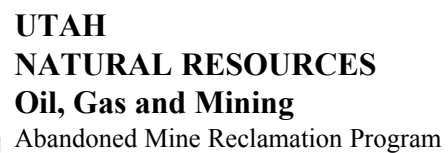
**Cross-section (Top):** Shows a wall with a textured surface. A key wall is indicated, extending into the ribs and top of the opening. The wall thickness is 3". The footing height is 12-18".

**Plan View (Bottom):** Shows the footing dimensions. The footing width is 32" MIN. The footing length is 18" MIN. The footing is reinforced with 1/2" rebar and anchor pins (if required). The footing is covered with 3" cover. The footing is divided into sections with 12" O.C. and 24" O.C. spacing.

**Labels:**

- KEY WALL INTO RIBS AND TOP OF OPENING
- FILL BETW WITH
- 12-18"
- 3"
- 18" MIN
- 1/2" REBAR ANCHOR PINS (IF REQUIRED)
- 3" COVER
- 32" MIN.
- 6"
- 6"
- 12" O.C.
- 24" O.C.
- FOOTING DE PLAN VIEW

Diagram illustrating a stone chimney structure. The chimney is composed of stones with mortar joints. The top section is labeled "18" MIN." and the bottom section is labeled "24" MIN.". The text "CONCRETE FOOTER AND REBAR ANCHOR PINS MAY BE OMITTED WITH OWNER'S APPROVAL WHERE THE SILL IS COMPETENT ROCK" is present. The text "SPACES N STONES ORTAR" is also visible.



# MINE RECLAMATION PROJECT

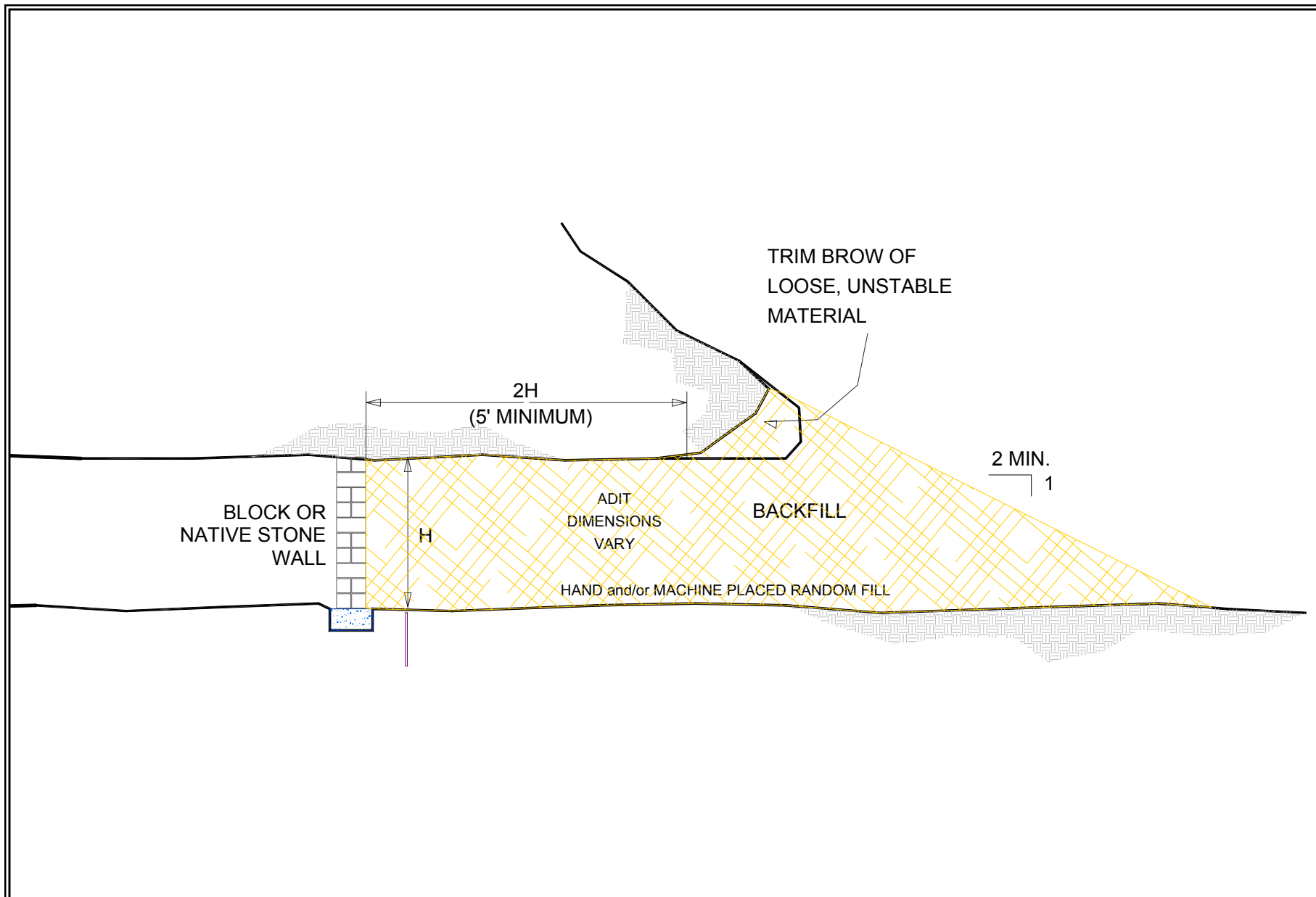
## NATIVE STONE WALL CLOSURE

Scale: as noted

Design: LAA Drafting: JCR

Refer to Spec Section 0250

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## MINE RECLAMATION PROJECT

## WALL AND BACKFILL CLOSURE

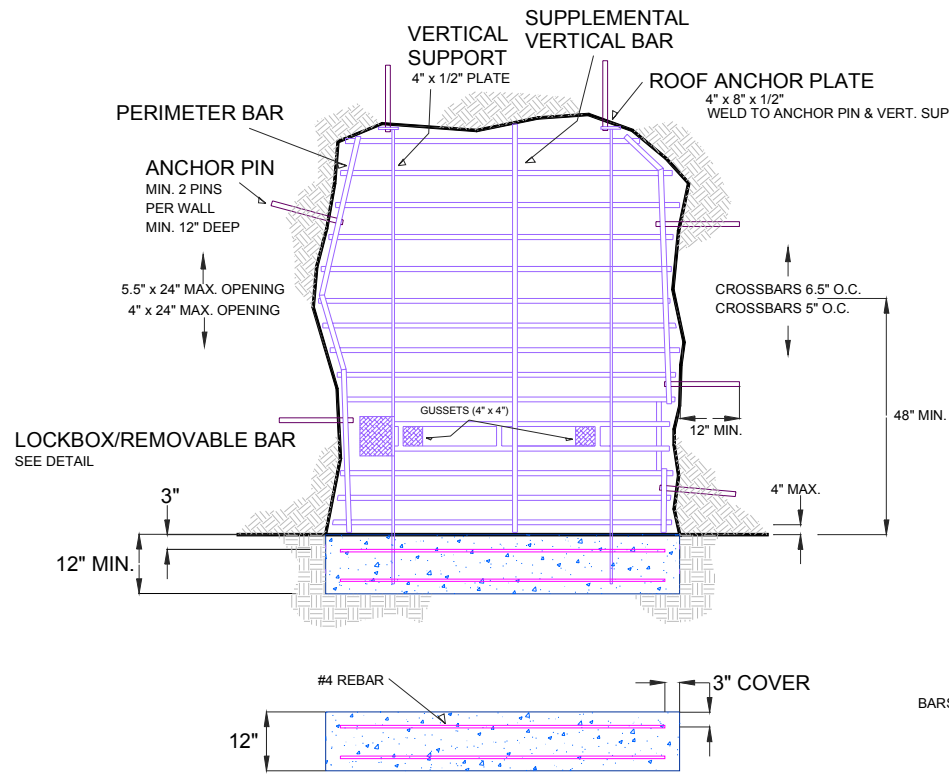
Scale: as noted

Design: LAA Drafting: JCR

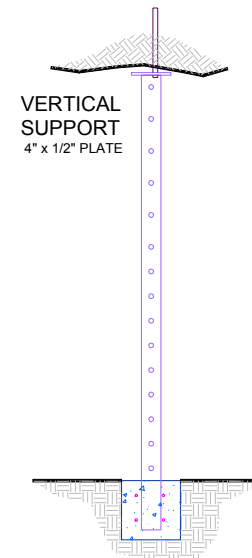
Refer to Spec Section 0250

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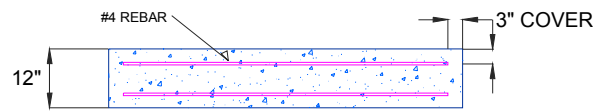
TYPICAL ELEVATION



TYPICAL SECTION



BARS FILLET WELD ALL INTERSECTIONS



FOOTING DETAIL  
PLAN VIEW

NOTE: ALL GATE STEEL TO BE 12-14% MANGANESE STEEL (MANGANAL OR EQUIV.)

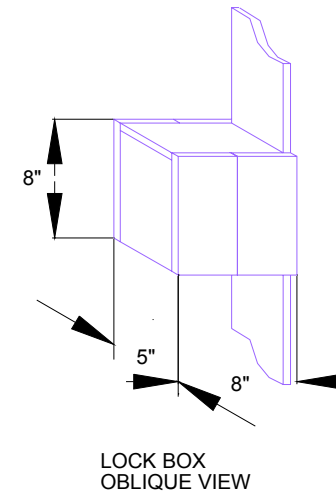
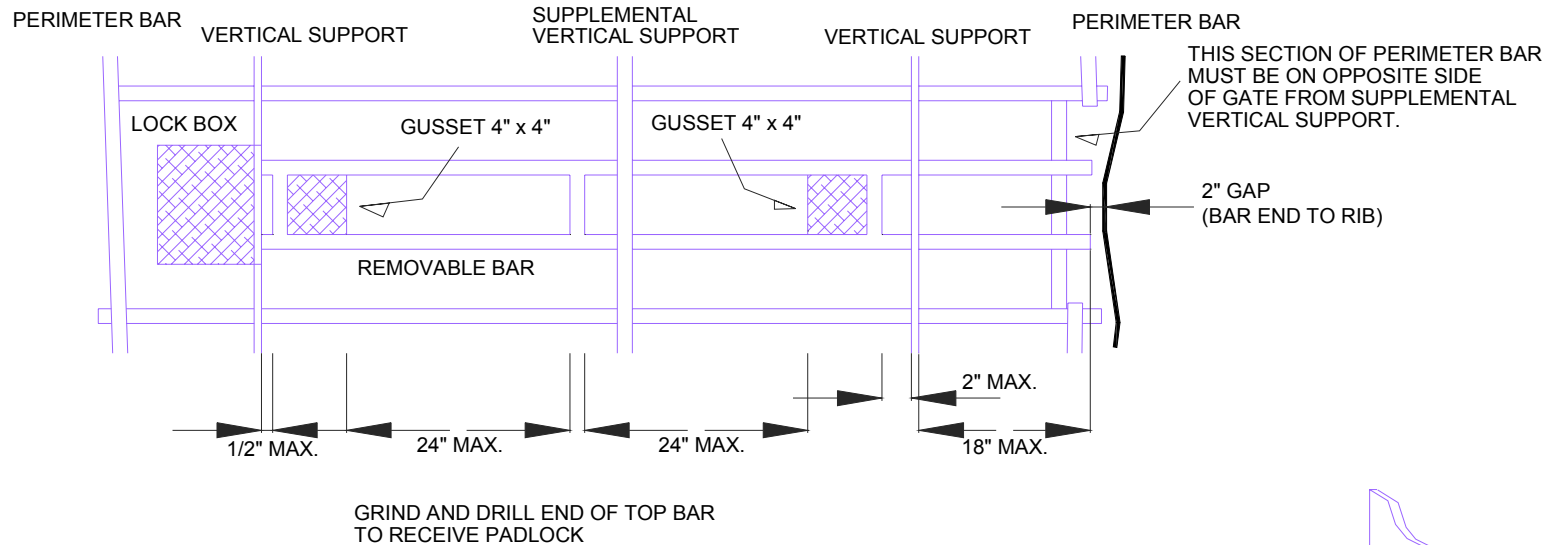


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**MINE RECLAMATION  
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**BAT GATE CLOSURE**

Scale: as noted	Design: LAA Drafting: JCR
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3-D OBLIQUE VIEW FROM BELOW



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## MINE RECLAMATION PROJECT

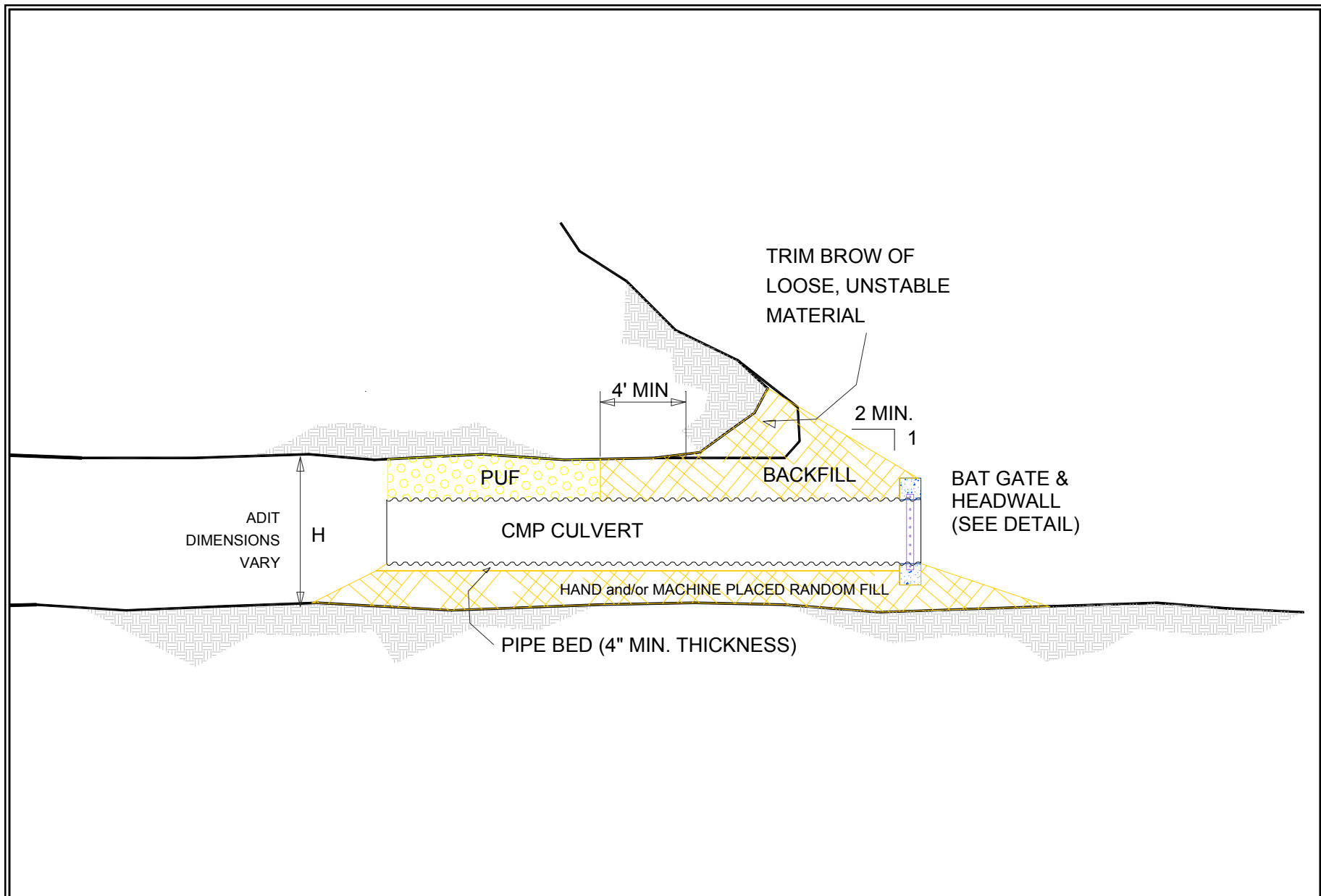
## BAT GATE CLOSURE DETAILS

Scale: as noted

Design: LAA Drafting: JCR

Refer to Spec Section 0250

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## MINE RECLAMATION PROJECT

## CMP BAT GATE CLOSURE

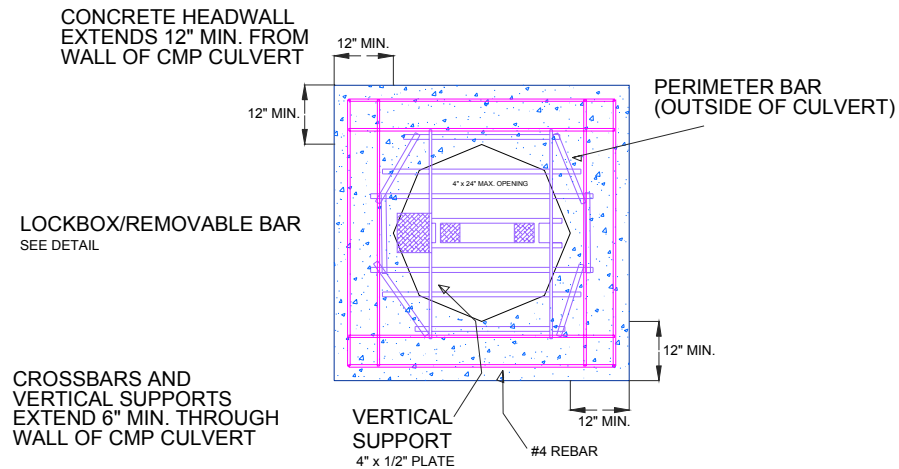
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Design: LAA Drafting: JCR

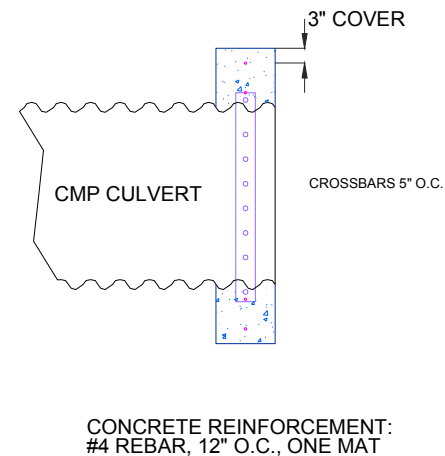
Refer to Spec Section 0250

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TYPICAL ELEVATION



TYPICAL SECTION



NOTE: ALL GATE STEEL TO BE 12-14% MANGANESE STEEL (MANGANAL OR EQUIV.)



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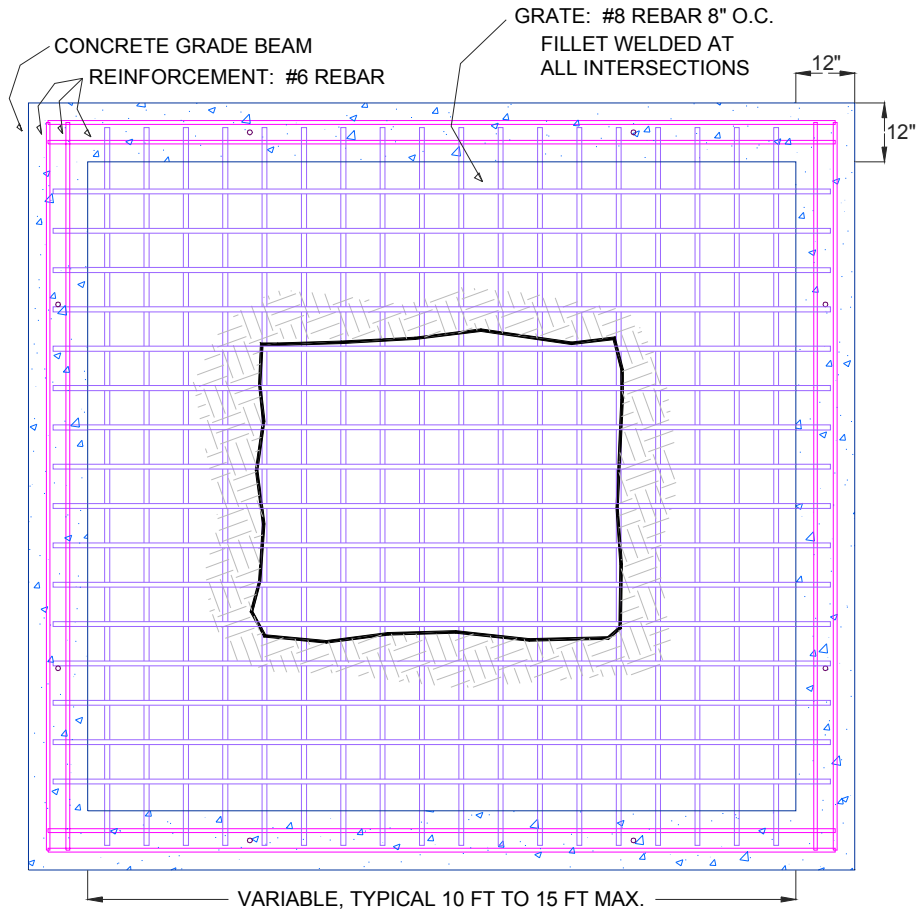
**MINE RECLAMATION  
PROJECT**

**CMP BAT GATE CLOSURE DETAILS**

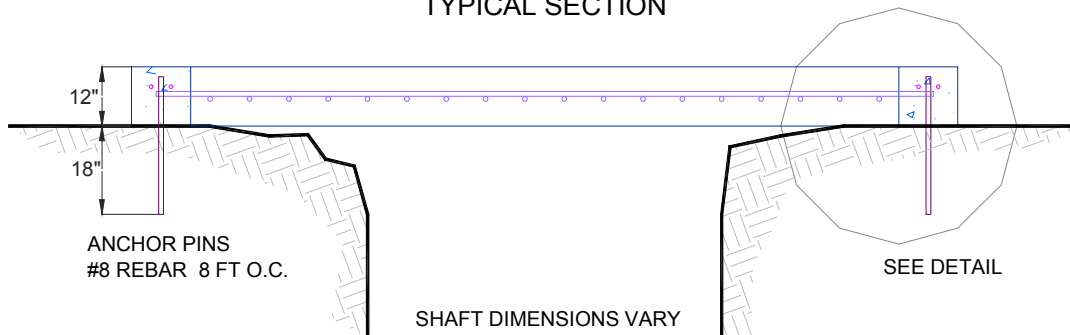
Scale: as noted  
Refer to Spec Section 0250

Design: LAA Drafting: JCR  
Sheet E9 of E14

## TYPICAL PLAN



## TYPICAL SECTION



### REBAR SHAFT GRATE CLOSURE

Design: LAA Drafting: JCR

Scale: as noted

Sheet E10 of E14

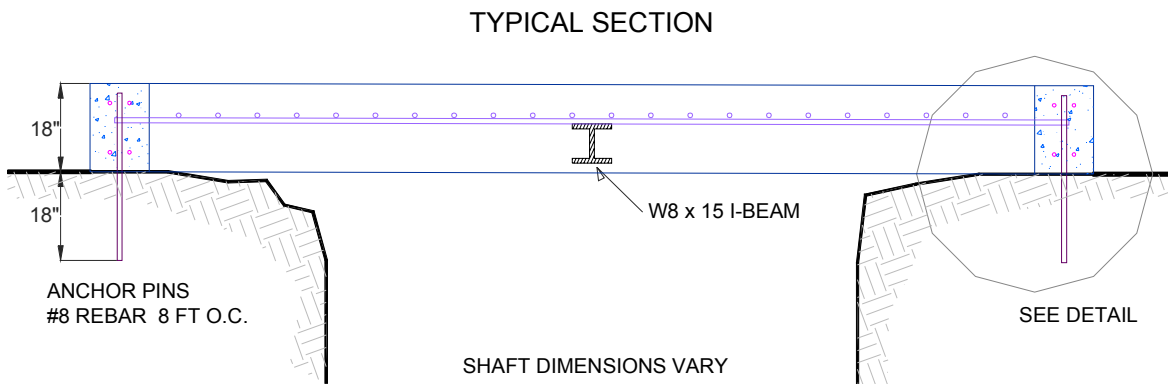
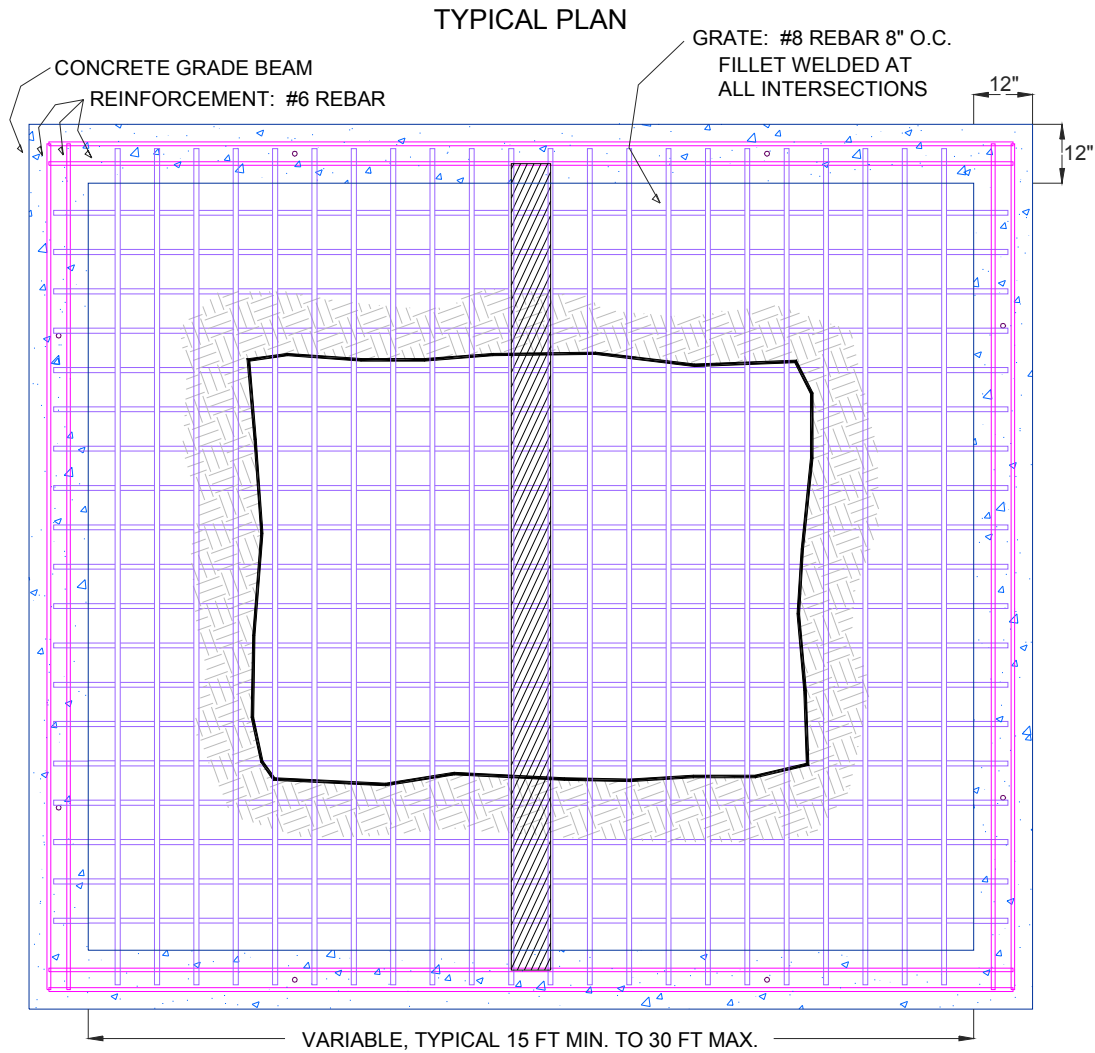
Refer to Spec Section 0250

### MINE RECLAMATION PROJECT

**UTAH**  
**NATURAL RESOURCES**  
**Oil, Gas and Mining**



Abandoned Mine Reclamation Program



# REBAR SHAFT GRATE (WITH I-BEAM)

Design: LAA Drafting: JCR

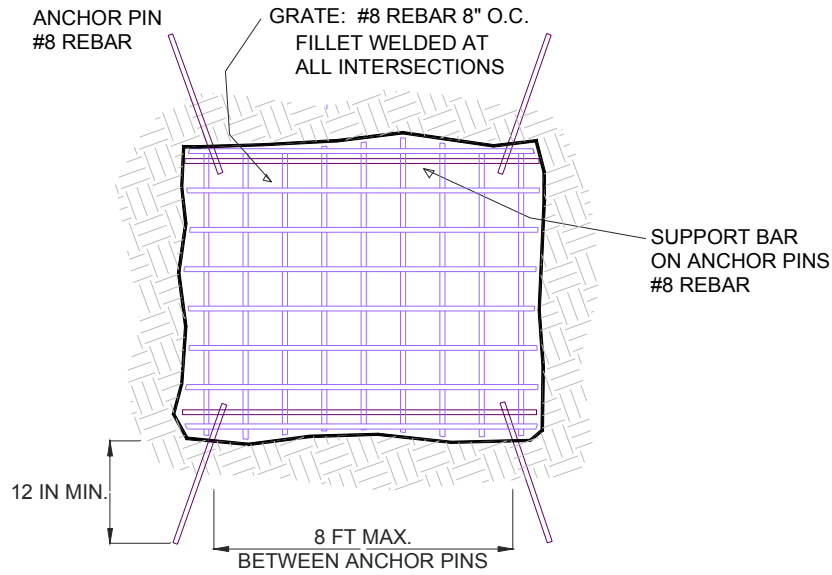
Scale: as noted

Refer to Spec Section 0250

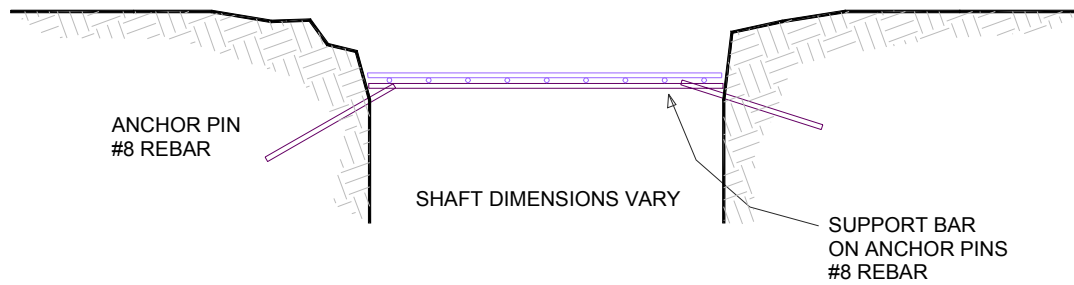
Sheet E11 of E14

## MINE RECLAMATION PROJECT

# TYPICAL PLAN



# TYPICAL SECTION



## REBAR SHAFT GRATE (PINNED)

Design: LAA Drafting: JCR

Scale: as noted

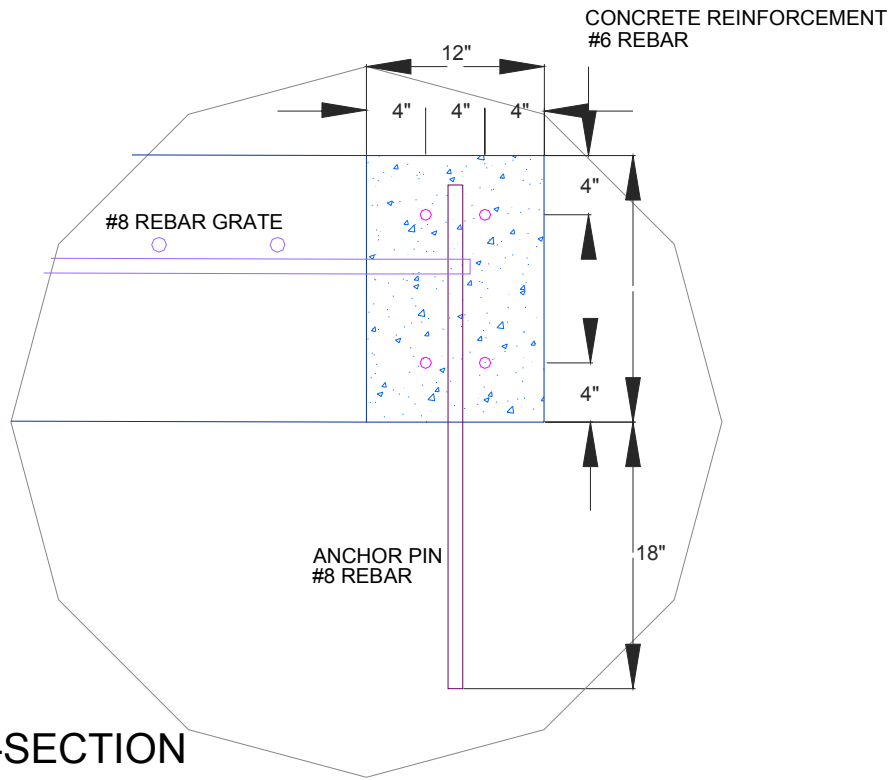
Sheet E12 of E14

## MINE RECLAMATION PROJECT

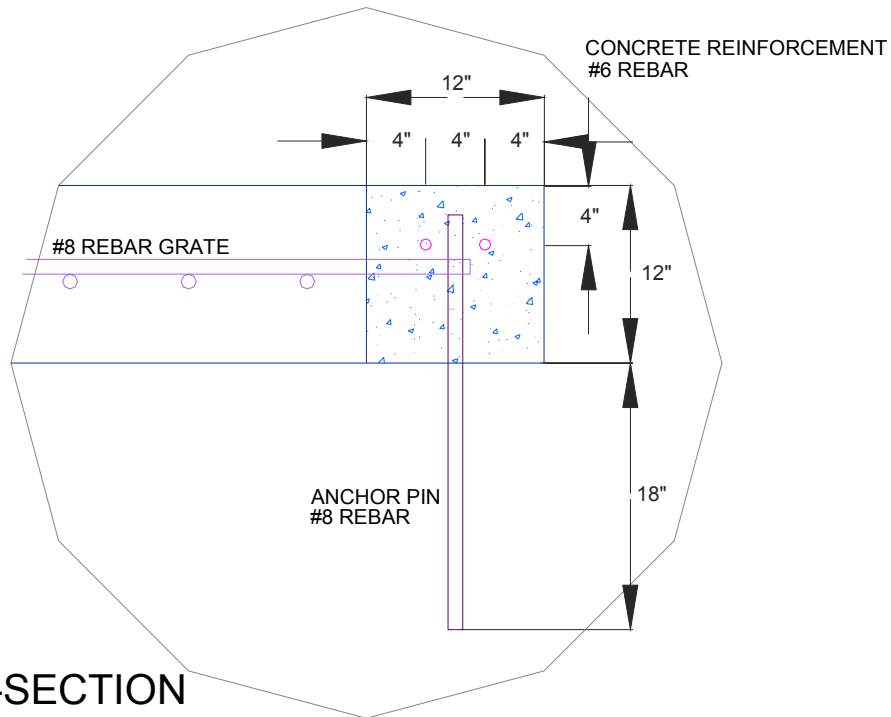
UTAH  
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CROSS-SECTION  
12" x 18" GRADE BEAM



CROSS-SECTION  
12" x 12" GRADE BEAM

**REBAR SHAFT GRATE GRADE BEAM DETAILS**

Design: LAA Drafting: JCR

Scale: as noted

Refer to Spec Section 0250

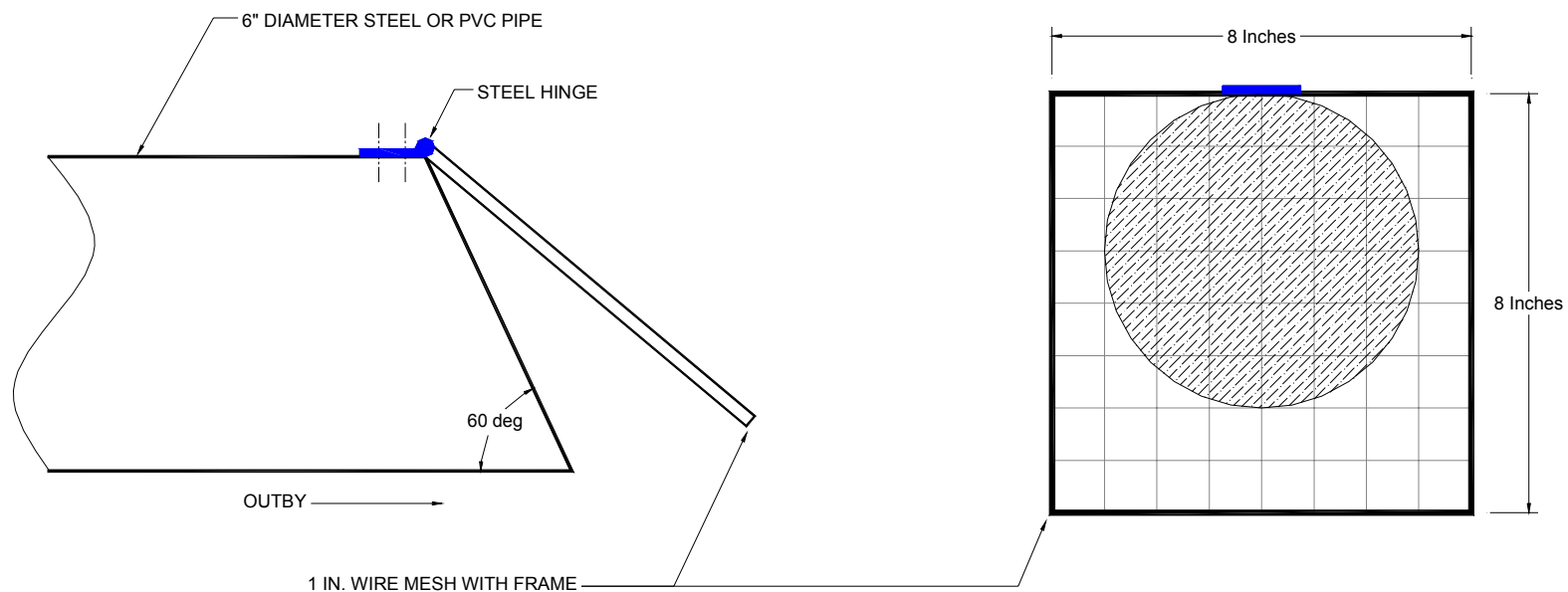
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**MINE RECLAMATION  
PROJECT**

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Abandoned Mine Reclamation Program



NOTE: STEEL OR PVC PIPE TO EXTENT 12 INCHES  
INBY AND OUTBY WALL OR FILL MATERIAL



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## MINE RECLAMATION PROJECT

### ONE-WAY TRAP DOOR CLOSURE DETAILS

Scale: as noted

Design: LAA Drafting: MES

Refer to Spec Section 0250

Sheet E14 of E14